ABSTRACTS

Policy Research Working Paper Series

Numbers 3080–3134

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The World Bank
Research Support Team
Development Economics
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1. **Prepare a 250 word abstract.** The abstract should set out the main questions addressed in the paper and the key findings, putting them (if appropriate) in the context of the relevant literature. For empirical papers, briefly describe the data, including such details as the period covered, the countries or country groups included, the size of the sample, and the type of survey, as appropriate. ***The abstract will be published as submitted.*** To ensure maximum impact for your work, consult existing working paper abstracts and test your abstract by asking a colleague who is not familiar with the paper to read it before submission.

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Questions regarding the Policy Research Working Paper Series can be directed to Evelyn Alfaro-Bloch (ext. 33984).

Produced by the Research Support Team

Policy Research Working Paper Series

Abstracts

Numbers 3080–3134

Table of Contents

3080. Can Fiscal Rules Help Reduce Macroeconomic Volatility in the Latin America and Caribbean Region?

Guillermo Perry
(June 2003)

The debate on fiscal policy in Europe centers on how to let automatic stabilizers work while achieving fiscal consolidation. There is significant agreement on the importance of using fiscal policy as a counter-cyclical instrument, as monetary policy can no longer play this role. In contrast, most of the discussion on fiscal policy in Latin America and the Caribbean region (LAC) deals just on solvency issues, largely ignoring the effects of the economic cycle. This is surprising as LAC economies are much more volatile than their European counterparts and have been generally applying pro-cyclical fiscal policies that exacerbate volatility. Some analysts and policymakers appear to think that counter-cyclical fiscal policies are a luxury that only industrial countries can indulge in or, at least, that LAC countries (with the exception of Chile) that have successfully put in place a counter-cyclical fiscal policy need to deal first with pressing adjustment and solvency issues before they attempt to reduce the highly pro-cyclical character of their fiscal policies.

Perry argues that this is a major mistake because the costs of pro-cyclical fiscal policies in LAC are huge in growth and welfare terms, especially for the poor, and because pro-cyclical policies and rules tend to develop a deficit bias, thus ending up being nonsustainable and noncredible. Perry illustrates both propositions. He then examines the causes of the procyclicality of fiscal policies in LAC and discusses how well-designed fiscal rules may help to deal with the political economy and credibility factors behind pro-cyclicality. He also examines conflicts between flexibility and credibility in rules, showing how a good design can both facilitate the operation of automatic stabilizers while at the same time supporting solvency goals and enhancing credibility. Perry evaluates the experience with different fiscal rules and institutions in LAC to see the extent they have helped or can help to achieve the twin goals of avoiding deficit and pro-cyclical biases.

This paper is a product of the Office of the Chief Economist, Latin America and the Caribbean Region. Copies of the paper are available free from the World Bank, 1818 H Street NW, Washington, DC 20433. Please contact Ruth Izquierdo, room I8-014, telephone 202-458-4161, fax 202-522-7528, email address rizquierdo@worldbank.org. Policy Research Working Papers are also posted on the Web at http://econ.worldbank.org. The author may be contacted at gperry@worldbank.org. (23 pages)

3081. The Anatomy of a Multiple Crisis: Why was Argentina Special and What Can We Learn from It?

Guillermo Perry and Luis Servén
(June 2003)

The Argentine crisis has been variously blamed on fiscal imbalances, real overvaluation, and self-fulfilling investor pessimism triggering a capital flow reversal. Perry and Servén provide an encompassing assessment of the role of these and other ingredients in the recent macroeconomic collapse. They show that in the final years of convertibility, Argentina was not hit harder than other emerging markets in Latin America and elsewhere by global terms-of-trade and financial disturbances. So the crisis reflects primarily the high vulnerability to disturbances built into Argentina's policy framework. Three key sources of vulnerability are examined: the hard peg adopted against optimal currency area considerations in a context of wage and price inflexibility; the fragile fiscal position resulting from an expansionary stance in the boom; and the pervasive mismatches in the portfolios of banks' borrowers. While there were important vulnerabilities in each of these areas, neither of them was higher than those affecting other countries in the region, and thus there is not *one* obvious suspect. But the three reinforced each other in such a perverse way that taken jointly they led to a much larger vulnerability to adverse external shocks than in any other country in the region. Underlying these vulnerabilities was a deep structural problem of the Argentine economy that led to harsh policy dilemmas before and after the crisis erupted. On the one hand, the Argentine trade structure made a peg to the dollar highly inconvenient from the point of view of the real economy. On the other hand, the strong preference of Argentinians for the dollar as a store of value—after the hyperinflation and confiscation experiences of the 1980s—had led to a highly dollarized economy in which a hard peg or even full dollarization seemed reasonable alternatives from a financial point of view.

This paper—a product of the Office of the Chief Economist, Latin America and the Caribbean Region—is part of a larger effort in the region to understand the causes of macroeconomic volatility. Copies of the paper are available free from the World Bank, 1818 H Street NW, Washington, DC 20433. Please contact Ruth Izquierdo, room I8-012, telephone 202-458-4161, fax 202-522-7528, email address rizquierdo@worldbank.org. Policy Research Working Papers are also posted on the Web at http://econ.worldbank.org. The authors may be contacted at gperry@worldbank.org or lserven@worldbank.org. (57 pages)

3082. Financial Dollarization and Central Bank Credibility

Kevin Cowan and Quy-Toan Do
(June 2003)

Why do firms and banks hold foreign currency denominated liabilities? Cowan and Do argue that foreign currency debt, by altering the effect of a devaluation on output, has a disciplining effect when the Central Bank's objectives differ from the social optimum. However, under imperfect information, bad priors about the Central Bank induce excess dollarization of liabilities, which in turn limits the ability of the Central Bank to conduct an optimal monetary policy. In addition the economy may become stuck in a "dollarization trap" in which dollarized liabilities limit the ability of agents to learn the true type of the monetary authority. The model has clear-cut policy implications regarding the taxation of foreign currency liabilities as a way to encourage perfect information and avoid dollarization traps. Moreover, it reinforces the existing argument for Central Bank independence. Finally, the authors believe this model to be consistent with a growing empirical literature on the determinants of foreign currency liabilities and their relationships to Central Bank credibility.

This paper—a product of the Poverty Team, Development Research Group—is part of a larger effort in the group to understand the determinants of financial fragility. Copies of the paper are available free from the World Bank, 1818 H Street NW, Washington, DC 20433. Please contact Quy-Toan Do, room MC3-306, telephone 202-473-4813, fax 202-522-1151, email address qdo@worldbank.org. Policy Research Working Papers are also posted on the Web at http://econ.worldbank.org. Kevin Cowan may be contacted at kevinco@iadb.org. (32 pages)

3083. Mine Closure and its Impact on the Community: Five Years after Mine Closure in Romania, Russia, and Ukraine

Michael Haney and Maria Shkaratan
(June 2003)

Against the backdrop of economic transition, several countries in Eastern Europe have undertaken far-reaching programs to restructure their coal sectors, which in the 1990s were in a state of deep crisis. One aspect of restructuring has been the closure of loss-making mines, which are often located in communities where the coal industry is the dominant employer, and the significant downsizing of the workforce. Mitigation efforts that are implemented at the time of mine closure (such as severance payments) are usually intended only for the laid-off workers.

Haney and Shkaratan examine the impact of mine closure on the entire community five years after mine closure in Romania, Russia, and Ukraine. Using quantitative and qualitative research methods and based on interviews with national, regional, and local experts, and members of the affected population, the authors describe the effect of mine closure and evaluate the various mitigation efforts that have been used by governments in such cases. They conclude with policy recommendations of broad relevance to programs of industrial restructuring in communities dominated by a single industry.

This paper—a product of the Infrastructure and Energy Services Department, Europe and Central Asia Region—is part of a larger effort in the region to evaluate the social impact of industrial restructuring. Copies of the paper are available free from the World Bank, 1818 H Street NW, Washington, DC 20433. Please contact Larisa Marquez, room H11-114, telephone 202-473-6578, fax 202-614-1582, email address lmarquez@worldbank.org. Policy Research Working Papers are also posted on the Web at http://econ.worldbank.org. The authors may be contacted at mhaney@worldbank.org or mshkaratan @worldbank.org. (61 pages)

3084. Major Trade Trends in East Asia: What are their Implications for Regional Cooperation and Growth?

Francis Ng and Alexander Yeats
(June 2003)

This study's empirical findings have positive implications for further efforts to expand East Asian regional trade and cooperation initiatives. Since the mid-1980s regional intra-trade has grown at a rate roughly double that of world trade, and at a rate far higher than the intra-trade of the North America Free Trade Agreement (NAFTA) member countries or the European Union. Evidence based on intra-industry trade ratios or statistics on international production sharing show economic linkages and the interdependence of East Asian economies have considerably strengthened over the past two decades. On a global scale, East Asia (excluding Japan) now originates 19 percent of world trade, which is approximately the same share as the NAFTA member countries.

This paper—a product of Trade, Development Research Group—is part of a larger effort in the group to study regional trade and growth prospects. Copies of the paper are available free from the World Bank, 1818 H Street NW, Washington, DC 20433. Please contact Paulina Flewitt, room MC3-333, telephone 202-473-2724, fax 202-522-1159, email address pflewitt @worldbank.org. Policy Research Working Papers are also posted on the Web at http://econ.worldbank.org. Francis Ng may be contacted at fng@worldbank.org. (93 pages)

3085. Export Profiles of Small Landlocked Countries: A Case Study Focusing on their Implications for Lesotho

Francis Ng and Alexander Yeats
(June 2003)

World Bank demographic and country characteristic statistics identify 16 small landlocked countries that are similar to Lesotho. Ng and Yeats attempt to determine what useful policy information can be derived from the recent trade performance of these "comparators." Among questions they pose are whether the trade profiles of the comparators suggest potentially promising export ventures for Lesotho, do they indicate directions for a geographic diversification of trade, or do they suggest products in which Lesotho might acquire a comparative advantage. The authors also use U.S. partner country statistics to evaluate Lesotho's export performance in this major market.

The U.S. data indicate Lesotho lost competitive export shares for about three-quarters of its major clothing products during the late 1990s. The data show these losses were primarily to the North America Free Trade Agreement (NAFTA) countries in the Caribbean. Lesotho was competing on basically equal terms and did not fare well. But it is generally held that the most efficient clothing exporters are in the Far East and not Latin America. Lesotho's difficulties in competing with the latter have worrisome implications for its ability to compete with East Asian exporters when the Multifiber Arrangement is phased out.

The comparative advantage profiles of the landlocked comparator countries suggest Lesotho's options for a greatly needed export diversification may be wider than is assumed. One or more of the comparator countries developed a comparative advantage in 110 four-digit SITC (non-clothing) manufactures which are generally labor-intensive in production. Many of these goods should also be suitable for production and export by Lesotho.

International production sharing often involves the importation and further assembly of components in developing countries. This activity can significantly broaden the range of new products in which a country can diversify. Statistics show many landlocked comparator countries have moved into component assembly operations, and it appears this activity could contribute to Lesotho's export diversification and industrialization. But the quality problems associated with Lesotho's trade statistics makes it impossible to determine the extent to which local production sharing is occurring. A special effort is needed to tabulate reliable statistics on Lesotho's current involvement in this activity.

Finally, the authors attempt to determine how the commercial policy environment in Lesotho compares with that in other countries. Policymakers previously had difficulty in addressing this issue, but several recent efforts to compile comprehensive cross-country indices of the quality of governance and commercial policies now provide relevant information. These statistics suggest domestic commercial policies make Lesotho relatively less attractive to foreign investment than many other developing countries. Less than 20 percent of all Latin American countries have a domestic commercial environment judged to be inferior to that in Lesotho, while the corresponding share for East Asia is under 30 percent. Overall, almost 70 percent of all developing countries appear to pursue commercial policies that make them as, or more, attractive to foreign investment than Lesotho.

This paper—a product of Trade, Development Research Group—was prepared for the background study of Lesotho Diagnostic Trade Integration Study in summer 2002. Copies of this paper are available free from the World Bank, 1818 H Street NW, Washington, DC 20433. Please contact Paulina Flewitt, room MC3-333, telephone 202-473-2724, fax 202-522-1159, email address pflewitt @worldbank.org. Policy Research Working Papers are also posted on the Web at http://econ.worldbank.org. Francis Ng may be contacted at fng@worldbank.org. (52 pages)

3086. Intertemporal Excess Burden, Bequest Motives, and the Budget Deficit

Derek Hung Chiat Chen
(June 2003)

Chen aims to empirically determine the significant factors that affect the levels of budget deficits of central governments across time and across countries. He empirically tests two prominent theories of budget deficits—the Barro (1979) tax-smoothing approach, and the still-untested theory of negative bequest motives advocated by Cukierman and Meltzer (1989). The author uses econometric techniques including fixed-effects (both country and time) panel regressions spanning 87 countries over the period 1975 to 1992, and the Griliches treatment of missing data. Chen finds relatively stronger statistical support for the tax-smoothing approach among developing countries but not in industrial countries. The existence of empirical evidence supporting the theory of negative bequest motives is indeterminate. The author also conducted post-regression analyses to assess the proportion of observed differences in budget deficits the factors were actually able to explain. These reveal that both theories are generally weak in accounting for intertemporal changes in budget deficit shares for both industrial and developing countries. The theories performed significantly better in accounting for cross-section differences. The author has many contributions to the literature. First, he analyzes the question of what determines the size of central government budget deficits using cross-country time series data leading into the 1990s. Second, he provides empirical tests of the still-untested Cukierman-Meltzer (1989) negative bequest motive theory of budget deficits. By using the panel data, Chen attempts to determine the factors that influence not only the intertemporal differences in budget deficits but also those factors that lead to cross-country differences. Last but not least, he provides some preliminary evidence that poverty reduction is necessary for long-term government budget deficit reduction.

This paper is a product of the Global Knowledge and Learning Division, World Bank Institute. Copies of the paper are available free from the World Bank, 1818 H Street NW, Washington, DC 20433. Please contact Derek Chen, room J2-178, telephone 202-458-1602, fax 202-522-1492, email address dchen2@worldbank.org. Policy Research Working Papers are also posted on the Web at http://econ.worldbank.org. (70 pages)

3087. Gender, Generations, and Nonfarm Participation

M. Shahe Emran, Misuzu Otsuka, and Forhad Shilpi
(June 2003)

Emran, Otsuka, and Shilpi present an empirical analysis of intergenerational links in nonfarm participation with a focus on gender effects. Using survey data from Nepal, the evidence shows that the mother exerts a strong influence on a daughter's employment choice. Having a mother in a nonfarm sector raises a daughter's probability of nonfarm participation by 200 percent. The effects are truly dramatic for skilled nonfarm jobs. Having a mother in a skilled job raises a daughter's probability by 1,200 percent. Having a father in a nonfarm sector, on the other hand, does not have any significant effect on a son's probability of nonfarm participation when the endogeneity of education and assets is corrected for by the two-stage conditional maximum likelihood approach. But a moderate positive intergenerational correlation between fathers and sons exists for skilled jobs.

This paper—a product of Rural Development, Development Research Group—is part of a larger effort in the group to understand the process of development of the rural nonfarm sector. Copies of the paper are available free from the World Bank, 1818 H Street NW, Washington, DC 20433. Please contact Pauline Kokila, room MC3-604, telephone 202-473-3716, fax 202-522-1151, email address pkokila @worldbank.org. Policy Research Working Papers are also posted on the Web at http://econ.worldbank.org. The authors may be contacted at semran@gwu.edu, motsuka@jhu.edu, or fshilpi@worldbank.org. (33 pages)

3088. U.S. Contingent Protection against Honey Imports: Development Aspects and the Doha Round

Julio J. Nogués
(June 2003)

On December 10, 2001 the U.S. Department of Commerce (DOC) imposed steep antidumping duties against honey imports from Argentina and China ranging from 32.6 percent to 183.8 percent, and a countervailing duty against Argentina of 5.9 percent. A previous antidumping investigation in 1995 ended with a suspension "agreement" that curtailed U.S. imports from China by around 30 percent. Millions of beekeepers around the world, most of them poor, make a living from honey production, and a free and competitive world market would help raise their standards of living. Nevertheless, the sequential pattern of increasing and widening protectionism followed by the United States, the world's top importer, to include successful exporters under the effects of its contingent protection measures sends a clear message that other countries should think twice before investing in expanding honey exports to the United States.

In addition to looking into the trade effects of these contingent protection measures, Nogués concludes that under the regulatory arrangements of the DOC, Argentina's beekeepers never had a chance of defending themselves. For example, responding to the DOC's lengthy and sophisticated questionnaires that sought to determine cost of production went beyond the capacities of poor beekeepers. In the absence of information, the DOC resorted to evidence presented by the petitioners which was riddled with errors. The available evidence suggests that had beekeepers been capable of responding to the questionnaires, the margin of dumping would had been lower, if at all existent. This and other evidence discussed by Nogués suggest the urgent need to introduce reforms into the World Trade Organization antidumping and subsidy agreements. At the minimum what is required is a consensus that all respondents be given the same opportunity by the international trade rules. The author argues that at present this is not the case and offers suggestions for reforms.

This paper—a product of Trade, Development Research Group—is part of a larger effort in the group to improve trade policy work for development. Copies of the paper are available free from the World Bank, 1818 H Street NW, Washington, DC 20433. Please contact Paulina Flewitt, room MC3-333, telephone 202-473-2724, fax 202-522-1159, email address pflewitt @worldbank.org. Policy Research Working Papers are also posted on the Web at http://econ.worldbank.org. The author may be contacted at jnogues@infovia. com.ap. (39 pages)

3089. The "Glass of Milk" Subsidy Program and Malnutrition in Peru

David Stifel and Harold Alderman
(June 2003)

Stifel and Alderman evaluate the Vaso de Leche (VL) feeding program in Peru. They pose the question that if a community-based multistage targeting scheme such as that of the VL program is progressive, is it possible that the program can achieve its nutritional objectives? The authors address this by linking VL public expenditure data with household survey data to assess the targeting, and then to model the determinants of nutritional outcomes of children to see if VL program interventions have an impact on nutrition. They confirm that the VL program is well targeted to poor households and to those with low nutritional status. While the bulk of the coverage of the poor is attributed to targeting of poor districts, the fact that the poor receive larger in-kind transfers is attributed to intradistrict targeting. But the impact of these food subsidies beyond their value as income transfers is limited by the degree to which the commodity transfers are inframarginal. The authors find that transfers of milk and milk substitutes from the VL program are inframarginal for approximately half of the households that receive them. So, it is not entirely surprising that they fail to find econometric evidence of the nutritional objectives of the VL program being achieved. In models of child standardized heights, the authors find no impact of the VL program expenditures on the nutritional outcomes of young children—the group to whom the program is targeted.

This paper—a product of Public Services, Development Research Group—is part of a larger effort in the group to understand the distribution of public services. Copies of the paper are available free from the World Bank, 1818 H Street NW, Washington, DC 20433. Please contact Hedy Sladovich, mail stop MC3-311, telephone 202-473-7698, fax 202-522-1154, email address hsladovich @worldbank.org. Policy Research Working Papers are also posted on the Web at http://econ.worldbank.org. The authors may be contacted at david.stifel@cornell. edu or halderman@worldbank.org. (35 pages)

3090. The Cotonou Agreement and its Implications for the Regional Trade Agenda in Eastern and Southern Africa

Manuel de la Rocha
(June 2003)

Subregional trade arrangements (RTAs) in Eastern and Southern Africa have proliferated in the past 10 to 15 years. The small size of most of the countries in the region, some of which are landlocked, and the security needs in the post independence period largely explain the rapid expansion. These arrangements are characterized by multiple and overlapping memberships, complex structures, and eventually, conflicting and confusing commitments. The influence of RTAs has been limited to assisting the region in increasing trade, attracting foreign direct investment, enhancing growth, and achieving convergence among member countries. But despite their limitations, RTAs have the potential, if properly designed and effectively implemented, to be an important instrument in integrating member countries into global markets. In 1998 most of the Southern African countries, as members of the Africa Caribbean Pacific group (ACP), signed the Cotonou Agreement with the European Union, which includes the negotiation of economic partnership agreements (EPAs) between the EU and the ACP. The Cotonou Agreement explicitly leaves to the ACP countries to decide the level and procedures of the EPA trade negotiations, taking into account the regional integration process. This raises the question of how to decide on the groupings in the context of conflicting regional trade agendas. De la Rocha argues that the Cotonou Agreement and EPA negotiations could become the external driving force that will push the regional organizations to rationalize and harmonize their regional trade arrangements, thus strengthening the integration process and economies of the region, and assisting the Eastern and Southern Africa region in becoming a more active partner in the global economy.

This paper—a product of the Regional Integration and Cooperation Unit, Africa Region—is part of a larger effort in the region to contribute to the debate on regional integration in Africa. Copies of the paper are available free from the World Bank, 1818 H Street NW, Washington, DC 20433. Please contact Fatimata Sy, room J5-280, telephone 202-458-9750, fax 202-473-8276, email address fksy@worldbank. org. Policy Research Working Papers are also posted on the Web at http:// econ.worldbank.org. The author may be contacted at mdelarocha@worldbank.org. (25 pages)

3091. Labor Market Policies and Unemployment in Morocco: A Quantitative Analysis

Pierre-Richard Agénor and Karim El Aynaoui
(July 2003)

Agénor and El Aynaoui study the impact of labor market policies on unemployment in Morocco. They begin by reviewing the main features of the labor market. Then they present a quantitative framework that captures many of these features—such as a large public sector, high redundancy payments, powerful trade unions, and international labor migration. The authors simulate the impact of a cut in the minimum wage and a reduction in payroll taxation. The results indicate that these policies may have a significant impact in the short term on open unskilled unemployment. But they also show that labor market reforms, to be effective in the long run, may need to be accompanied by offsetting changes in the budget to avoid crowding-out effects on private investment.

This paper—a joint product of the Poverty Reduction and Economic Management Division, World Bank Institute and Poverty Reduction and Economic Management 2, Africa Technical Families—is part of a larger effort in the Bank to understand the impact of labor market reforms on growth and unemployment. Copies of the paper are available free from the World Bank, 1818 H Street NW, Washington, DC 20433. Please contact Maria Gosiengfiao, room J4-280, telephone 202-473-3363, fax 202-676-9810, email address mgosiengfiao@worldbank.org. Policy Research Working Papers are also posted on the Web at http://econ.worldbank.org. The authors may be contacted at pagenor @worldbank.org or kelaynaoui @worldbank.org. (82 pages)

3092. The Integrated Macroeconomic Model for Poverty Analysis: A Quantitative Macroeconomic Framework for the Analysis of Poverty Reduction Strategies

Pierre-Richard Agénor, Alejandro Izquierdo, and Hippolyte Fofack
(July 2003)

Agénor, Izquierdo, and Fofack present a dynamic, quantitative macroeconomic framework designed for analyzing the impact of adjustment policies and exogenous shocks on poverty and income distribution. They emphasize the role of labor market segmentation, urban informal activities, the impact of the composition of public expenditure on supply and demand, and credit market imperfections. Numerical simulations for a prototype low-income country highlight the importance of accounting for the various channels through which poverty alleviation programs and debt relief may ultimately affect the poor.

This paper—a product of the Poverty Reduction and Economic Management Division, World Bank Institute—is part of a larger effort in the institute to understand the impact of adjustment policies on the poor. Copies of the paper are available free from the World Bank, 1818 H Street NW, Washington, DC 20433. Please contact Maria Gosiengfiao, room J4-280, telephone 202-473-3363, fax 202-676-9810, email address mgosiengfiao@worldbank.org. Policy Research Working Papers are also posted on the Web at http://econ.worldbank.org. The authors may be contacted at pagenor@worldbank.org or hfofack@worldbank.org. (126 pages)

3093. Migration and Human Capital in Brazil during the 1990s

Norbert M. Fiess and Dorte Verner
(July 2003)

Nearly 40 percent of all Brazilians have migrated at one point and time, and in-migrants represent substantial portions of regional populations. Migration in Brazil has historically been a mechanism for adjustment to disequilibria. Poorer regions and those with fewer economic opportunities have traditionally sent migrants to more prosperous regions. As such, the southeast region, where economic conditions are most favorable, has historically received migrants from the northeast region. Migration should have benefited both regions. The southeast benefits by importing skilled and unskilled labor that makes local capital more productive. The northeast can benefit from upward pressures on wages and through remittances that migrant households return to their region of origin. The northeast of Brazil is a net sender of migrants to the southeast. In recent years a large number of people moved from the southeast to the northeast. Compared with northeast to southeast (NE-SE) migrants, southeast to northeast (SE-NE) migrants are less homogeneous regarding age, wage, and income. SE-NE migrants are on average poorer and less educated than the southeast average, while NE-SE migrants are financially better off and higher educated than the northeast average. Fiess and Verner find that the predicted returns to migration are increasing with education for SE-NE migrants and decreasing for NE-SE migrants. They further observe that the returns to migration have been decreasing for NE-SE migrants and increasing for SE-NE migrants between 1995 and 1999. This finding helps explain migration dynamics in Brazil. While the predicted positive returns to migration for NE-SE migrants indicate that NE-SE migration follows in general the human capital approach to migration, the estimated lower returns to migration for SE-NE may indicate that nonmonetary factors also play a role in SE-NE migration.

This paper—a product of the Office of the Chief Economist and the Economic Policy Sector Unit, Latin America and the Caribbean Region—is part of a larger effort in the region to understand migration patterns in Brazil. Copies of the paper are available free from the World Bank, 1818 H Street NW, Washington, DC 20433. Please contact Ruth Izquierdo, room I8-012, telephone 202-458-4161, fax 202-522-7528, email address rizquierdo @worldbank.org. Policy Research Working Papers are also posted on the Web at http://econ.worldbank.org. The authors may be contacted at nfiess@worldbank.org or dverner@worldbank.org. (39 pages)

3094. Oil, Agriculture, and the Public Sector: Linking Intersector Dynamics in Ecuador

Norbert M. Fiess and Dorte Verner
(July 2003)

In a recent paper, Fiess and Verner (2000) analyze sectoral growth in Ecuador and find significant long-run and short-run relationships between the agricultural, industrial, and service sectors. They take this as evidence against the dual economy model which rules out a long-run relationship between agricultural and industrial output and show further that a more detailed picture of the growth process can be discovered, once the agricultural, industrial, and service sectors are disaggregated further into intrasector components. Fiess and Verner extend their initial results and provide insight from a multivariate cointegration analysis of intrasector components. They are able to identify three cointegrating relationships, each of which has its own meaningful economic interpretation—two cointegration relationships capture the direct and indirect effects of the "petrolization" of the Ecuadorian economy. A third relationship clearly indicates a link between agriculture and industrial activity. Since this third cointegrating relationship seems to coincide in time with the trade liberalization at the end of the 1980s, promoting agriculture appears to be an important way to promote sustainable economic growth in Ecuador.

This paper—a product of the Office of the Chief Economist and the Economic Policy Sector Unit, Latin America and the Caribbean Region—is part of a larger effort in the region to better understand intersectoral growth dynamics. Copies of the paper are available free from the World Bank, 1818 H Street NW, Washington, DC 20433. Please contact Ruth Izquierdo, room I8-012, telephone 202-458-4161, fax 202-522-7528, email address rizquierdo@worldbank.org. Policy Research Working Papers are also posted on the Web at http://econ.worldbank.org. The authors may be contacted at nfiess@worldbank.org or dverner @worldbank.org. (16 pages)

3095. The Emerging Project Bond Market: Covenant Provisions and Credit Spreads

Mansoor Dailami and Robert Hauswald
(July 2003)

The emergence in the 1990s of a nascent project bond market to fund long-term infrastructure projects in developing countries merits attention. Dailami and Hauswald compile detailed information on a sample of 105 bonds issued between January 1993 and March 2002 for financing infrastructure projects in developing countries, document their contractual covenants, and analyze their pricing determinants. They find that on average, project bonds are issued at approximately 300 basis points above U.S. Treasury securities, have a surprisingly high issue size of US$278 million, a maturity of slightly under 12 years, and are rated slightly below investment grade. In terms of geographic origin, projects in Asia and Latin America have issued more bonds than those located in other regions.

Much of the recent work relating to the role of contractual covenants to the determination of bond prices has focused on the U.S. corporate bond market with its unique bankruptcy code (Chapter 11) and well developed legal framework, recognizing the bond contract as the sole instrument of defining the rights and duties of various parties. In circumstances in which the underpinning legal and institutional frameworks governing contract formation and enforcement are not well developed, the link between bond pricing and legal framework becomes important. This finding is confirmed by the authors' econometric analysis of project bond pricing model. So, investors take into account the quality of the host country's legal framework and reward projects located in countries that adhere to the rule of law with tighter credit spreads and lower funding costs.

This paper—a product of the Development Prospects Group—is part of a larger effort in the group to promote a healthy flow of investment capital to developing countries' infrastructure. Copies of the paper are available free from the World Bank, 1818 H Street NW, Washington, DC 20433. Please contact Sarah Crow, room MC2-358, telephone 202-473-0763, fax 202-522-2578, email address scrow@worldbank.org. Policy Research Working Papers are also posted on the Web at http://econ.worldbank.org. The authors may be contacted at mdailami@worldbank.org or hauswald@american.edu. (35 pages)

3096. International Survey of Integrated Financial Sector Supervision

José de Luna Martínez and Thomas A. Rose
(July 2003)

Despite the intense debate on the advantages and disadvantages of adopting integrated supervision that has taken place in recent years, little is known about the experiences of countries that have adopted it and the obstacles and challenges they have faced to implement it. In an attempt to shed light on this area, de Luna Martínez and Rose present the results of a survey conducted in a group of 15 countries that have adopted integrated supervision. After a brief review of the literature on integrated supervision, the authors examine four topics:

- The reasons cited by this group of countries for establishing an integrated supervisory agency.
- The scope of regulatory and supervisory powers of these agencies.
- The progress of these agencies in harmonizing their regulatory and supervisory practices across the intermediaries they supervise.
- The practical problems faced by policymakers in adopting integrated supervision.

The survey revealed that the group of integrated supervisory agencies is not as homogeneous as it seems. Important differences arise with regard to the scope of regulatory and supervisory powers the agencies have been given. In fact, contrary to popular belief, less than 50 percent of the agencies can be categorized as megasupervisors. Another finding is that in most countries progress toward the harmonization of prudential regulation and supervision across financial intermediaries remains limited. Interestingly, the survey revealed that practically all countries believe they have achieved a higher degree of harmonization in the regulation and supervision of banks and securities companies than between banks and insurance firms. The survey also identified some practical problems faced by this group of countries in establishing their unified supervisory agencies. The authors discuss these problems, along with the practical lessons and recommendations provided by the 15 agencies to other countries considering integrated supervision, in the final section of the paper.

This paper—a product of Financial Sector Operations and Policy Department—is part of a larger effort in the department to analyze recent developments in financial sector regulation and supervision. Copies of the paper are available free from the World Bank, 1818 H Street NW, Washington, DC 20433. Please contact Susana Coca, room MC9-757, telephone 202-473-7474, fax 202-522-3475, email address scoca@worldbank.org. Policy Research Working Papers are also posted on the Web at http://econ.worldbank.org. The authors may be contacted at jdelunamartinez@worldbank.org or trose @worldbank.org. (44 pages)

3097. Measuring Up: New Directions for Environmental Programs at the World Bank

Piet Buys, Susmita Dasgupta, Craig Meisner, Kiran Pandey, David Wheeler, Katharine Bolt, Kirk Hamilton, and Limin Wang
(July 2003)

The World Bank's new environment strategy advocates cost-effective reduction of air and water pollutants that are most harmful to human health. In addition, it addresses threats to the livelihood of over one billion people who live on fragile lands—lands that are steeply sloped, arid, or covered by natural forests. The new approach will require accurate information about environmental threats to health and livelihood, as well as an appropriate resource-allocation strategy.

Drawing on recent research at the World Bank and elsewhere, this paper attempts to apply an optimal investment approach. It develops a rule for optimal cross-country resource allocation that reflects the Bank's investment policy. Using this rule, the paper estimates optimal country shares of the Bank's environmental investments from two sets of variables: threats from outdoor air pollution, water pollution, and fragile lands; and estimates of the likelihood that Bank projects will succeed. The paper combines the country shares with the Bank's investment data to estimate optimal country allocations for each environmental problem. Finally, it aggregates the country results to allocations for the major regions in which the Bank operates.

Combining optimal investments for pollution and fragile lands, it finds that the largest share of total investment goes to East Asia (44 percent), followed by South Asia (21 percent) and Sub-Saharan Africa (19 percent). Other regions get significantly lower shares.

This paper—a joint product of Infrastructure and Environment, Development Research Group, and the Environment Department—is part of a larger effort to implement the World Bank's new environment strategy. Copies of the paper are available free from the World Bank, 1818 H Street NW, Washington, DC 20433. Please contact Yasmin D'Souza, room MC2-205, telephone 202-473-1449, fax 202-522-3230, email address ydsouza@worldbank.org. Policy Research Working Papers are also posted on the Web at http://econ.worldbank.org. The authors may be contacted at pbuys @worldbank.org, sdasgupta@worldbank.org, cmeisner@worldbank.org, kpandey @worldbank.org, dwheeler@worldbank.org, kbolt@worldbank.org, khamilton @worldbank.org, or lwang1@worldbank.org. (39 pages)

3098. Governance and Economic Growth

Mark Gradstein
(July 2003)

Because protection of property rights cannot be appropriated by any individual, it is widely recognized as being the state's responsibility. Moreover, recent empirical evidence suggests that protection of property rights leads to higher investment levels and faster growth. The extent of property rights protection differs significantly across countries. Gradstein integrates the emergence of property rights within a simple growth framework. Drawing on North (1990), he presents a model where economic performance and enforcement of property rights may reinforce each other. Initial conditions determine the economy's convergence to a high-income or a low-income steady state. Existing empirical evidence offers tentative support for this theory.

This paper—a product of Public Services, Development Research Group—is part of a larger effort in the group to understand the role of governance for economic development. Copies of the paper are available free from the World Bank, 1818 H Street NW, Washington, DC 20433. Please contact Hedy Sladovich, room MC3-607, telephone 202-473-7698, fax 202-522-1154, email address hsladovich@worldbank.org. Policy Research Working Papers are also posted on the Web at http://econ.worldbank.org. The author may be contacted at mgradstein @worldbank.org. (14 pages)

3099. Creating Partnerships for Capacity Building in Developing Countries: The Experience of the World Bank

F. Desmond McCarthy, William Bader, and Boris Pleskovic
(July 2003)

McCarthy, Bader, and Pleskovic discuss a variety of experiences in a number of transition and developing countries to build institutional capacity for economics education. A flexible approach met with some success. The approach uses partnerships that combine the often different needs of a number of private donors with the World Bank on the supply side. Much of the success was due to adopting each effort to the individual country situation. The authors also provide a brief summary of five academic institutions and four research networks in Europe, Africa, Asia, and Latin America.

This paper—a product of Partnerships, Capacity Building, and Outreach, Development Economics—is part of a larger effort in the Bank to build capacity for economic education. Copies of the paper are available free from the World Bank, 1818 H Street NW, Washington, DC 20433. Please contact Deena Philage, room MC4-402, telephone 202-473-6971, fax 202-522-0304, email address dphilage @worldbank.org. Policy Research Working Papers are also posted on the Web at http://econ.worldbank.org. The authors may be contacted at dmccarthy @worldbank.org, wbader@worldbank.org, or bpleskovic@worldbank.org. (22 pages)

3100. Governance of Communicable Disease Control Services: A Case Study and Lessons from India

Monica Das Gupta, Peyvand Khaleghian, and Rakesh Sarwal
(July 2003)

Das Gupta, Khaleghian, and Sarwal study the impact of governance and administrative factors on communicable disease prevention in the Indian state of Karnataka using survey data from administrators, frontline workers, and elected local representatives. They identify a number of key constraints to the effective management of disease control in India, in misaligned incentives, and the institutional arrangements for service delivery. The authors discuss these under five headings: administrative issues; human resource management; horizontal coordination; decentralization, community involvement, and public accountability; and implementation of public health laws and regulations. They find that India's public health system is configured to be highly effective at top-down *reactive* work, such as bringing disease outbreaks under control, but not for the more routine collaborations required for *proactive* disease prevention. The authors conclude with policy recommendations that take into account the complexity of India's system of public administration and the need for simple reforms that can be easily implemented.

This paper—a product of Public Services, Development Research Group—was prepared as background for the *World Development Report 2004: Making Services Work for Poor People*. Copies of this paper are available free from the World Bank, 1818 H Street NW, Washington, DC 20433. Please contact Hedy Sladovich, room MC3-607, telephone 202-473-7698, fax 202-522-1154, email address hsladovich@worldbank.org. Policy Research Working Papers are also posted on the Web at http://econ.worldbank.org. The authors may be contacted at mdasgupta @worldbank.org, pkhaleghian@worldbank.org, or rsarwal@jhsph.edu. (35 pages)

3101. Portfolio Preferences of Foreign Institutional Investors

Reena Aggarwal, Leora Klapper, and Peter D. Wysocki
(July 2003)

Aggarwal, Klapper, and Wysocki examine the relationship between foreign investment and the attributes of emerging market countries and firms in which investment is made. Their findings indicate that countries with higher levels of economic development and floating exchange rate regimes tend to have greater ability to obtain foreign capital. After controlling for the country's level of economic development, they find that firms in countries with stronger shareholder rights and legal framework attract more foreign capital. The authors also find that foreign institutions allocate more of their assets to firms with better corporate governance after controlling for other country and firm attributes. The main firm-level measures of corporate governance are derived from accounting quality variables. Their results imply that steps can be taken both at the country and the firm level to create an environment conducive to foreign portfolio investment. The analysis is based on a unique dataset consisting of equity positions of U.S. mutual funds in emerging markets.

This paper—a product of Finance, Development Research Group—is part of a larger effort in the group to study international corporate governance. Copies of the paper are available free from the World Bank, 1818 H Street NW, Washington, DC 20433. Please contact Agnes Yaptenco, room MC3-446, telephone 202-473-1823, fax 202-522-1155, email address ayaptenco@worldbank.org. Policy Research Working Papers are also posted on the Web at http://econ.worldbank.org. The authors may be contacted at aggarwal @georgetown.edu, lklapper@worldbank.org, or wysockip@mit.edu. (47 pages)

3102. Investing in Infrastructure: What is Needed from 2000 to 2010?

Marianne Fay and Tito Yepes
(July 2003)

Fay and Yepes estimate demand for infrastructure services over the first decade of the new millennium based on a model that relates demand for infrastructure with the structural change and growth in income the world is expected to undergo between now and 2010. It should be noted that predictions are based on estimated demand rather than on any absolute measure of "need" such as those developed in the Millennium Development Goals. The authors also provide estimates of associated investment and maintenance expenditures and predict total required resource flows to satisfy new demand while maintaining service for existing infrastructure.

This paper—a product of the Infrastructure Vice Presidency—is part of a larger effort in the vice presidency to improve knowledge of infrastructure needs. Copies of the paper are available free from the World Bank, 1818 H Street NW, Washington, DC 20433. Please contact Marianne Fay, room I5-007, telephone 202-458-7200, fax 202-676-9594, email address mfay @worldbank.org. Policy Research Working Papers are also posted on the Web at http://econ.worldbank.org. The authors may be contacted at mfay@worldbank.org or tyepes@worldbank.org. (19 pages)

3103. Ownership Structure and Initial Public Offerings

Reena Aggarwal and Leora Klapper
(July 2003)

Aggarwal and Klapper study the relationship between ownership structure, corporate governance, and the initial public offering (IPO) process. They examine equity ownership by different institutions, such as foreign and domestic financial institutions, banks with and without lending relationships, venture capitalists, and corporations prior to an IPO. The authors also analyze the relationship between ownership structure and corporate governance. They use a unique dataset of 152 Indian IPOs during the period 1999–2001 to analyze ownership of shares by main groups of shareholders. The authors find a relationship between ownership structure and firm-specific factors such as sales, leverage, and profitability, and IPO characteristics such as percentage of equity locked up, gross proceeds, and exchange of listing. There is also a strong relationship between ownership by different types of institutions. Ownership is also tied to bank lending relationships. Finally, the authors find strong relationships between ownership types and corporate governance. For example, firms with foreign investors are more likely to have an outside chief executive officer and offer an employee stock option plan.

This paper—a product of Finance, Development Research Group—is part of a larger effort in the group to study international corporate governance. Copies of the paper are available free from the World Bank, 1818 H Street NW, Washington, DC 20433. Please contact Agnes Yaptenco, room MC3-446, telephone 202-473-1823, fax 202-522-1155, email address ayaptenco@worldbank.org. Policy Research Working Papers are also posted on the Web at http://econ.worldbank.org. The authors may be contacted at aggarwal@georgetown.edu or lklapper @worldbank.org. (27 pages)

3104. Does Strict Employment Protection Discourage Job Creation? Evidence from Croatia

Jan Rutkowski
(August 2003)

Employment protection legislation in Croatia is among the most strict in Europe. Firing is difficult and costly, and flexible forms of employment are limited. Is this apparent rigidity reflected—as one would expect based on standard economic theory—in low labor market dynamics? Is job creation low and hiring limited? Is the job security of insiders achieved at the cost of outsiders not being able to enter the labor market? Rutkowski attempts to answer these questions by examining job flows. If the employment protection legislation is binding, then job and worker turnover should be low. He shows that this is indeed the case. Hiring is limited and the average job tenure is very long in

Croatia. Job destruction is low, however job creation is still lower. The result is accumulation of unemployment, in large part due to new labor market entrants not being able to find a job.

The high degree of job protection also seems to strengthen the bargaining position of insiders and results in relatively high wages. So, wages in Croatia are higher than among its competitors, even after adjusting for productivity. These high labor costs are likely to contribute to limited job creation in existing firms, but also are likely to discourage the entry of—and thus job creation in—new firms. The author presents evidence that firm growth has been indeed limited in Croatia, contributing to the low employment level.

Rutkowski examines other potential causes of high unemployment in Croatia (the unemployment benefit system, labor taxation, the wage structure, and skill and spatial mismatches). He argues that they do not play a substantial part in accounting for poor labor market outcomes in Croatia. The author concludes that the stringent employment protection legislation is the key labor market institution behind low job creation and high unemployment. Based on this he recommends specific measures aimed at liberalizing the labor market to foster job creation and employment.

This paper—a product of the Human Development Sector Unit, Europe and Central Asia Region—is part of a larger effort in the region to examine labor market performance and its contribution to economic growth and poverty reduction. Copies of the paper are available free from the World Bank, 1818 H Street NW, Washington, DC 20433. Please contact Jan Rutkowski, room H7-170, telephone 202-458-4569, fax 202-477-3387, email address jrutkowski @worldbank.org. Policy Research Working Papers are also posted on the Web at http://econ.worldbank.org. (63 pages)

3105. Further Evidence on the Link between Finance and Growth: An International Analysis of Community Banking and Economic Performance

Allen N. Berger, Iftekhar Hasan, and Leora F. Klapper
(August 2003)

Berger, Hasan, and Klapper contribute to both the finance-growth literature and the community banking literature by testing the effects of the relative health of community banks on economic growth, and investigating potential transmission mechanisms for these effects using data from 1993–2000 on 49 nations. Data from both industrial and developing nations suggest that greater market shares and efficiency ranks of small, private, domestically-owned banks are associated with better economic performance, and that the marginal benefits of higher shares are greater when the banks are more efficient. Only mixed support is found for hypothesized transmission mechanisms through improved financing for small and medium enterprises or greater overall bank credit flows. Data from developing nations are also consistent with favorable economic effects of foreign-owned banks, but unfavorable effects from state-owned banks.

This paper—a product of Finance, Development Research Group—is part of a larger effort in the group to study international banking. Copies of the paper are available free from the World Bank, 1818 H Street NW, Washington, DC 20433. Please contact Agnes Yaptenco, room MC3-446, telephone 202-473-1823, fax 202-522-1155, email address ayaptenco @worldbank.org. Policy Research Working Papers are also posted on the Web at http://econ.worldbank.org. The authors may be contacted at aberger@frb.gov, hasan@rpi.edu, or lklapper@worldbank.org. (38 pages)

3106. Governance Matters III: Governance Indicators for 1996–2002

Daniel Kaufmann, Aart Kraay, and Massimo Mastruzzi
(August 2003)

Kaufmann, Kraay, and Mastruzzi present estimates of six dimensions of governance covering 199 countries and territories for four time periods: 1996, 1998, 2000, and 2002. These indicators are based on several hundred individual variables measuring perceptions of governance, drawn from 25 separate data sources constructed by 18 different organizations. The authors assign these individual measures of governance to categories capturing key dimensions of governance and use an unobserved components model to construct six aggregate governance indicators in each of the four periods. They present the point estimates of the dimensions of governance as well as the margins of errors for each country for the four periods. The governance indicators reported here are an update and expansion of previous research work on indicators initiated in 1998 (Kaufmann, Kraay, and Zoido-Lobatón 1999a, b and 2002). The authors also address various methodological issues, including the interpretation and use of the data given the estimated margins of errors.

This paper—a joint product of the Global Governance Department, World Bank Institute, and Macroeconomics and Growth, Development Research Group—is part of a larger effort in the Bank to generate and analyze worldwide governance indicators, and to assess the causes and consequences of governance. Copies of this paper are available free from the World Bank, 1818 H Street NW, Washington, DC 20433. Please contact Anna Bonfield, room MC3-354, telephone 202-473-1248, fax 202-522-3518, email address abonfield@worldbank.org. The data and a Web-based graphical interface are available at *www.worldbank.org/wbi/governance/govdata2002/*. Policy Research Working Papers are also posted on the Web at http://econ.worldbank.org. The authors may be contacted at dkaufmann @worldbank.org, akraay@worldbank.org, or mmastruzzi@worldbank.org. (115 pages)

3107. More Favorable and Differential Treatment of Developing Countries: Toward a New Approach in the World Trade Organization

Bernard Hoekman , Constantine Michalopoulos, and L Alan Winters
(August 2003)

Hoekman, Michalopoulos, and Winters discuss options that could be considered in the World Trade Organization (WTO) to provide more favorable treatment—so-called special and differential treatment (SDT)—to small and low-income countries. They argue that there is a need both for differentiation across WTO members and for steps that would benefit all developing countries. The authors suggest the following to make the Doha Round more supportive of development:

- A binding commitment by industrial countries to abolish export subsidies and nontariff barriers (tariff quotas) and to reduce most-favored-nation tariffs on labor-intensive products of export interest to developing countries to no more than 5 percent in 2010, and to no more than 10 percent for agricultural products. All tariffs on manufactures should go to zero by 2015, the target date for the achievement of the Millennium Development Goals. Liberalization should also be undertaken by developing countries on the basis of a formula approach.

- A binding commitment by industrial countries on services to expand temporary access for service providers by a specific amount—for example, equal to an additional 1 percent of the workforce—and not to restrict cross-border trade (for example, by telecom channels).
- Unilateral action by all industrial countries to extend preferential market access for less developed countries, and to simplify eligibility criteria, especially rules of origin.
- Affirmation by the WTO that core disciplines relating to the use of trade policy apply equally to all WTO members.
- Acceptance of the principle that for small and low-income countries "one size does not fit all" when it comes to domestic regulation and to WTO agreements requiring substantial investment of resources.
- Recognition that some WTO agreements need to be adapted to make them more supportive of development, and a consequent willingness by industrial countries to modify them.
- Expansion of development assistance to bolster trade capacity in poor countries and strengthening of the links between trade-related technical assistance and the mechanisms through which aid priorities are determined in developing countries

In practice, calls for specific types of SDT often appear to be motivated by a perception that a certain WTO rule is "anti-development" and that therefore developing countries should be exempted from the rule in question. The authors suggest that the appropriate solution to such problems is to change the rules rather than seek an opt-out. What should be up front changes in rules and what should be part of the negotiating agenda is a major issue which needs to be addressed at the Cancun Ministerial meeting.

The suggestion that SDT should focus primarily on WTO rules and be limited to those countries that need it most—very small and poor economies—implies that criteria should be adopted to differentiate between countries. Leaving this to self-declaration—the current approach—is not feasible, while reliance on case-by-case, agreement-specific negotiation can generate excessive costs, discretion, and associated uncertainty. While the authors' preference is for a simple rule-of-thumb approach to determine eligibility, this is an issue that requires much more thought and discussion. They suggest that WTO members establish a high-level group to consider criteria that could be used for differentiation purposes and to determine the set of agreements to which differentiation will apply.

This paper—a product of Trade, Development Research Group—is part of a larger effort in the group to analyze the issues being negotiated in the WTO from a development perspective. Copies of the paper are available free from the World Bank, 1818 H Street NW, Washington, DC 20433. Please contact Paulina Flewitt, room MC3-333, telephone 202-473-2724, fax 202-522-1159, email address pflewitt @worldbank.org. Policy Research Working Papers are also posted on the Web at http://econ.worldbank.org. Bernard Hoekman may be contacted at bhoekman @worldbank.org. (31 pages)

3108. Stabilization and Association Process in the Balkans: Integration Options and their Assessment

Bartlomiej Kaminski and Manuel de la Rocha
(August 2003)

The stabilization and association process launched by the European Union in the aftermath of the Kosovo war in 1999 has created a new policy environment for five South East European countries (SEE-5). In exchange for EU assistance, the prospect of EU accession, and the continuation of preferential access to EU markets, SEE-5 governments have to upgrade their institutions and governance by European standards and engage in mutual regional cooperation, including stability pact member-countries.

Kaminski and de la Rocha examine the benefits to SEE-5 of trade liberalization along two dimensions and suggest conditions under which these could be maximized. They argue that the process of regional trade liberalization should be extended to multilateral liberalization, aligning SEE-5 most-favored-nation (MFN) applied tariffs on industrial products with EU MFN tariffs, and that priority be given to structural reforms and regional cooperation aimed at trade facilitation. As interindustry trade rather than intra-industry trade dominates intra-SEE-5 trade, the potential for expansion in intra-SEE-5 trade is limited at least within the confines of the existing production structures and transportation infrastructure. Therefore SEE-5 free trade agreements are unlikely to contribute to economic growth without concurrent efforts to improve infrastructure, trade facilitation, business, and investment climate, as well as to increase competition from MFN imports to external preferential suppliers through multilateral liberalization.

This paper—a product of the Poverty Reduction and Economic Management Sector Unit, Europe and Central Asia Region—was prepared in the context of the World Bank's regional program for South Eastern Europe. Its objective is to support the integration in the world economy—and in Europe in particular—of five countries that are currently engaged with the European Union in the stabilization and association process. Copies of the paper are available free from the World Bank, 1818 H Street NW, Washington, DC 20433. Please contact Fatimata Sy, room J5-280, telephone 202-458-9750, fax 202-473-8276, email address fksy@worldbank.org. Policy Research Working Papers are also posted on the Web at http://econ.worldbank.org. The authors may be contacted at bkaminski @gvpt.umd.edu. or mdelarocha @worldbank.org. (51 pages)

3109. The Impact of China's WTO Accession on East Asia

Elena Ianchovichina and Terrie Walmsley
(August 2003)

China's World Trade Organization (WTO) accession will have major implications for China and present both opportunities and challenges for East Asia. Ianchovichina and Walmsley assess the possible channels through which China's accession to the WTO could affect East Asia and quantify these effects using a dynamic computable general equilibrium model. China will be the biggest beneficiary of accession, followed by the industrial and newly industrializing economies (NIEs) in East Asia. But their benefits are small relative to the size of their economies and to the vigorous growth projected to occur in the region over the next 10 years. By contrast, developing countries in East Asia are expected to incur small declines in real GDP and welfare as a result of China's accession, mainly because with the elimination of quotas on Chinese textile and apparel exports to industrial countries China will become a formidable competitor in areas in which these countries have comparative advantage.

With WTO accession China will increase its demand for petrochemicals, electronics, machinery, and equipment from Japan and the NIEs, and farm, timber, energy products, and other manufactures from the developing countries in East Asia. New foreign investment is likely to flow into these expanding sectors. The overall impact on foreign investment is likely to be positive in the NIEs, but negative for the less developed East Asian countries as a result of the contraction of these economies' textile and apparel sector. As China becomes a more efficient supplier of services or a more efficient producer of high-end manufactures, its comparative advantage will shift into higher-end products. This is good news for the poor developing economies in East Asia, but it implies that the impact of China's WTO accession on the NIEs may change to include heightened competition in global markets.

This paper—a product of the Economic Policy Division, Poverty Reduction and Economic Management Network—is part of a larger effort in the network to assess the impact of China's WTO accession. Copies of the paper are available free from the World Bank, 1818 H Street NW, Washington, DC 20433. Please contact Sarah Lipscomb, room MC4-404, telephone 202-458-7266, fax 202-522-2530, email address economicpolicy @worldbank.org. Policy Research Working Papers are also posted on the Web at http://econ.worldbank.org. The authors may be contacted at eianchovichina @worldbank.org or t.walmsley@sheffield. ac.uk. (28 pages)

3110. Governance of Public Pension Funds: Lessons from Corporate Governance and International Evidence

David Hess and Gregorio Impavido
(August 2003)

An understanding of corporate governance theory can promote the adoption of appropriate governance tools to limit agency problems in public pension fund management. The absence of a market for corporate control hinders the translation of lessons from the private sector corporate world to public pension governance. The establishment of a fit and proper governing body for public pension funds thus may be even more important than the maintenance of a comparable body for private sector corporations. In particular, behavioral controls should be carefully designed.

This paper—a product of the Financial Sector Operations and Policy Department—is part of a larger effort in the department to study the effects of contractual savings development on financial markets. Copies of the paper are available free from the World Bank, 1818 H Street NW, Washington, DC 20433. Please contact Patricia Braxton, room MC9-704, telephone 202-473-2720, fax 202-522-7105, email address pbraxton @worldbank.org. Policy Research Working Papers are also posted on the Web at http://econ.worldbank.org. The authors may be contacted at dhess@business. rutgers.edu or gimpavido@worldbank.org. (35 pages)

3111. International Trade and Wage Discrimination: Evidence from East Asia

Günseli Berik, Yana van der Meulen Rodgers, and Joseph E. Zveglich, Jr.
(August 2003)

This study explores the impact of competition from international trade on wage discrimination by sex in two highly open economies. If discrimination is costly, as posited in neoclassical theory based on Becker (1959), then increased industry competitiveness from international trade reduces the incentive for employers to discriminate against women. Alternatively, increased international trade may contribute to employment segregation and reduced bargaining power for women to achieve wage gains. The approach centers on comparing the impact of international trade on wage discrimination in concentrated and nonconcentrated sectors. The effect of international trade competition is expected to be more pronounced in concentrated sectors, where employers can use excess profits in the absence of trade to cover the costs of discrimination. Wage discrimination is proxied by the portion of the wage gap that cannot be explained by observable skill differences between men and women. The empirical model is estimated using a rich panel data set of residual wage gaps, trade ratios, and alternative measures of domestic concentration for Taiwan (China) and the Republic of Korea during the 1980s and 1990s. Results indicate that in contrast to the implications of neoclassical theory, competition from foreign trade in concentrated industries is positively associated with wage discrimination. These results imply that concerted efforts to enforce equal pay legislation and apply effective equal opportunity legislation are crucial for ensuring that women's pay gains will match those of men in a competitive environment.

This paper—a product of the Gender Division, Poverty Reduction and Economic Management Network—is part of a larger effort in the network to understand the impact of trade on labor markets. Copies of the paper are available free from the World Bank, 1818 H Street NW, Washington, DC 20433. Please contact Max Ponglumjeak, room MC4-426, telephone 202-473-1060, fax 202-522-3237, email address mponglumjeak @worldbank.org. Policy Research Working Papers are also posted on the Web at http://econ.worldbank.org. Yana Rodgers may be contacted at yvrodg@wm.edu. (37 pages)

3112. On the Timing of Marriage, Cattle, and Weather Shocks in Rural Zimbabwe

Johannes Hoogeveen, Bas van der Klaauw, and Gijsbert van Lomwel
(August 2003)

Hoogeveen, van der Klaauw, and van Lomwel focus on the timing of marriages of women in rural Zimbabwe. Zimbabwean marriages are associated with bride wealth payments, which are transfers from (the family of) the groom to the bride's family. Unmarried daughters could therefore be considered assets who, at time of need, can be cashed in. The authors investigate to what extent the timing of a marriage of a daughter is affected by the economic conditions of the household from which she originates. They distinguish household-specific wealth levels and two types of shocks—correlated (weather) shocks and idiosyncratic shocks. The authors estimate a duration model using a unique panel survey of Zimbabwean smallholder farmers. The estimation results support the hypothesis that the timing of marriage is affected by household characteristics. Girls from households that experienced a negative (idiosyncratic) shock in their assets are more likely to marry.

This paper—a product of the Poverty Team, Development Research Group—is part of a larger effort in the group to assess how informal institutions respond to the needs of the poor. Copies of the paper are available free from the World Bank, 1818 H Street NW, Washington, DC 20433. Please contact Patricia Sader, room MC3-632, telephone 202-473-3902, fax 202-522-1153, email address psader@worldbank.org. Policy Research Working Papers are also posted on the Web at http://econ.worldbank.org. Johannes Hoogeveen may be contacted at jhoogeveen@worldbank.org. (45 pages)

3113. What Drives Bank Competition? Some International Evidence

Stijn Claessens and Luc Laeven
(August 2003)

Using bank-level data, Claessens and Laeven apply the Panzar and Rosse (1987) methodology to estimate the extent to which changes in input prices are reflected in revenues earned by specific banks in 50 countries' banking systems. They then relate this competitiveness measure to indicators of countries' banking system structures and regulatory regimes. The authors find systems with greater foreign bank entry and fewer entry and activity restrictions to be more competitive. They find no evidence that the competitiveness measure negatively relates to banking system concentration. Their findings confirm that contestability determines effective competition, especially by allowing (foreign) bank entry and reducing activity restrictions on banks.

This paper—a product of the Financial Sector Operations and Policy Department—is part of a larger effort in the department to study competition in the financial sector. Copies of the paper are available free from the World Bank, 1818 H Street NW, Washington, DC 20433. Please contact Rose Vo, room MC9-624, telephone 202-473-3722, fax 202-522-2031, email address hvo1@worldbank.org. Policy Research Working Papers are also posted on the Web at http://econ.worldbank.org. Luc Laeven may be contacted at llaeven@worldbank.org. (33 pages)

3114. The Dynamics of Foreign Bank Ownership: Evidence from Hungary

Giovanni Majnoni, Rashmi Shankar, and Éva Várhegyi
(August 2003)

The early start of the process of bank restructuring and privatization in Hungary provides a longer and richer amount of evidence than that available for any other transition economy. Majnoni, Shankar, and Várhegyi analyze the dynamics of bank restructuring in Hungary with a focus on the role played by foreign ownership. They explore the performance over time of foreign-owned Hungarian banks and study the extent to which efficiency gains are affected by the chosen acquisition strategy—strategic acquisition in contrast with investment in a newly established bank (greenfield investment)—or by the management style adopted after the acquisition. The authors supplement previous results on the effects of foreign bank ownership in three ways. First, they explicitly consider the time span required for the change of ownership to affect bank performance. Second, the authors explore how important the chosen acquisition strategy is for the success of an acquisition. And third, they study how relevant the adopted management style is to this end, as proxied by the degree of reliance on foreign management.

This paper—a product of the Financial Sector Network—is part of a larger effort to study the effects of financial liberalization. Copies of the paper are available free from the World Bank, 1818 H Street NW, Washington, DC 20433. Please contact Helena Issa, room I5-112, telephone 202-473-0154, fax 202-522-2106, email address hissa@worldbank.org. Policy Research Working Papers are also posted on the Web at http://econ.worldbank.org. The authors may be contacted at gmajnoni@worldbank.org, rashmi@brandeis.edu, or h7239var@helka.iif.hu. (30 pages)

3115. Integrating Housing Wealth into the Social Safety Net: The Elderly in Moscow

Robert Buckley, Kim Cartwright, Raymond Struyk, and Edward Szymanoski
(August 2003)

The elderly in Russia have often been among those least able to cope with all the changes that have taken place during the transition. Unlike the situation prior to reform—when pensions were stable—they now face considerable uncertainty. If they have not been in poverty, many have been close to it. While the elderly have experienced difficulties, they have also been the beneficiaries of a very large transfer of wealth. In Russia, as in most transition economies, housing was privatized, under giveaway terms. As a result, although many elderly households have low incomes, based on their wealth, their deprivation would appear to be less serious. Unfortunately, in the absence of a developed financial system, it is difficult to use this wealth without selling it. In Russia, all households, not just the elderly, have not been able to borrow.

The existence of such large unencumbered wealth holdings by lower income elderly households creates an opportunity to provide what might be termed "housing safety net insurance" at low public cost. More than reducing the incidence of poverty, such schemes could allow also many of the elderly to be able to move out of poverty and into middle income status.

The authors explain why many of the elderly in the former Soviet Union (FSU), not just in Russia, are likely to have so much housing wealth. Then they discuss how financial instruments could access this wealth. The authors also discuss the empirical situation of the elderly in Moscow, illustrating the potential demand for such products. Finally, they suggest that the results for Moscow are likely to be similar in many other FSU countries because these countries also have elderly populations who also own a great deal of unencumbered housing wealth.

This paper—a product of the Urban Unit, Transport and Urban Development Department—is part of a larger effort in the department to examine housing and poverty issues. Copies of the paper are available free from the World Bank, 1818 H Street NW, Washington, DC 20433. Please contact Oumi Himid, room F4K-300, telephone 202-458-0225, fax 202-522-3232, email address uhimid@worldbank.org. Policy Research Working Papers are also posted on the Web at http://econ.worldbank.org. The authors may be contacted at rbuckley@worldbank.org, kcartwri@ui.urban.org, rstruyk@ui.urban.org, or eszymanoski@ofheo.gov. (22 pages)

3116. Dollarization of the Banking System: Good or Bad?

Gianni De Nicoló, Patrick Honohan, and Alain Ize
(August 2003)

De Nicoló, Honohan, and Ize assess the benefits and risks associated with dollarization of the banking system. The authors provide novel empirical evidence on the determinants of dollarization, its role in promoting financial development, and on whether dollarization is associated with financial instability. They find that:

- The credibility of macroeconomic policy and the quality of institutions are both key determinants of cross-country variations in dollarization.
- Dollarization is likely to promote financial deepening only in a high inflation environment.
- Financial instability is likely higher in dollarized economies.

The authors discuss the implications of these findings for financial sector and monetary policies.

This paper—a joint product of Finance, Development Research Group, and the Monetary and Financial Systems Department, International Monetary Fund—is part of a larger effort to examine institutional determinants of financial development and stability. Copies of the paper are available free from the World Bank, 1818 H Street NW, Washington, DC 20433. Please contact Agnes Yaptenco, room MC3-439, telephone 202-473-8526, fax 202-522-1155, email address ayaptenco@worldbank.org. Policy Research Working Papers are also posted on the Web at http://econ.worldbank.org. The authors may be contacted at gdenicolo@imf.org, phonohan@worldbank.org, or aize@imf.org. (43 pages)

3117. Policy Research on Migration and Development

David Ellerman
(August 2003)

This is a survey and analysis—with commentary—of migration issues and the related development policies for the sending countries. "Migration and development" is considered an unsettled and unresolved area for good reason. The policy issues are surprisingly deep and run to basic issues such as the nature of development as opposed to simple poverty reduction. North-north migration (between industrial countries), south-south migration (between or within developing countries), and north-south migration (from developing to industrial countries) are all covered although the paper focuses on the north-south variety. Attention is paid to the question of the dynamic mechanism underlying migration being one of convergence or divergence. Very often the policy issues push one outside what would be narrowly considered as "migration studies." For example, policies to reduce the brain drain go directly to the issue of educational reform in developing countries while policies to increase the developmental impact of remittances quickly carry one into the nature of business development itself. Ronald Dore's ideas on educational reform are outlined as a policy approach to the brain drain problem. Jane Jacobs' ideas on development are outlined in greater length as they are little known in development economics and yet directly address the policy issues raised by migration and development.

This paper—a product of the Office of the Senior Vice President and Chief Economist, Development Economics—is part of a larger effort in the vice presidency to stay abreast of important development issues. Copies of the paper are available free from the World Bank, 1818 H Street NW, Washington, DC 20433. Please contact Bezawork Mekuria, room MC4-358, telephone 202-458-2756, fax 202-522-1158, email address bmekuria@worldbank.org. Policy Research Working Papers are also posted on the Web at http://econ.worldbank.org. The author may be contacted at david@ellerman.org. (63 pages)

3118. To Share or Not To Share: Does Local Participation Matter for Spillovers from Foreign Direct Investment?

Beata Smarzynska Javorcik and Mariana Spatareanu
(August 2003)

This paper examines whether the degree of spillovers from foreign direct investment is affected by the foreign ownership share in investment projects. The analysis, based on an unbalanced panel of Romanian firms from 1998–2000, provides evidence consistent with positive intrasectoral spillovers resulting from fully-owned foreign affiliates but not from projects with joint domestic and foreign ownership. This finding is consistent with literature suggesting that foreign investors tend to put more resources into technology transfer to their wholly-owned projects than to those owned partially. The data also indicate that the presence of partially foreign-owned projects is correlated with higher productivity of domestic firms in upstream industries, suggesting that domestic suppliers benefit from contacts with multinational customers. But the opposite is true for fully-owned foreign affiliates, which appear to have a negative effect on domestic firms in upstream industries. These results are consistent with the observation that foreign investors entering a host country through greenfield projects are less likely to source locally than those engaged in joint ventures or partial acquisitions. They are also in line with the evidence suggesting that fully-owned foreign subsidiaries use newer or more sophisticated technologies than jointly-owned investment projects, and thus may have higher requirements which only a few, if any, domestic suppliers are able to meet.

This paper—a product of Trade, Development Research Group—is part of a larger effort in the group to examine the impact of foreign direct investment on recipient countries. Copies of the paper are available free from the World Bank, 1818 H Street NW, Washington, DC 20433. Please contact Paulina Flewitt, room MC3-333, telephone 202-473-2724, fax 202-522-1159, email address pflewitt@worldbank.org. Policy Research Working Papers are also posted on the Web at http://econ.worldbank.org. The authors may be contacted at bsmarzynska

@worldbank.org or mspatareanu @worldbank.org. (28 pages)

3119. Evaluating the Impact of Conditional Cash Transfer Programs: Lessons from Latin America

Laura B. Rawlings and Gloria M. Rubio
(August 2003)

Unlike most development initiatives, conditional cash transfer programs recently introduced in the Latin America and the Caribbean region have been subject to rigorous evaluations of their effectiveness. These programs provide money to poor families, conditional on certain behavior, usually investments in human capital—such as sending children to school or bringing them to health centers on a regular basis. Rawlings and Rubio review the experience in evaluating the impact of these programs, exploring the application of experimental and quasi-experimental evaluation methods and summarizing results from programs launched in Brazil, Honduras, Jamaica, Mexico, and Nicaragua. Evaluation results from the first generation of programs in Brazil, Mexico, and Nicaragua show that conditional cash transfer programs are effective in promoting human capital accumulation among poor households. There is clear evidence of success in increasing enrollment rates, improving preventive health care, and raising household consumption. Despite this promising evidence, many questions remain unanswered about the impact of conditional cash transfer programs, including those concerning their effectiveness under different country conditions and the sustainability of the welfare impacts.

This paper—a product of the Human Development Sector Unit, Latin America and the Caribbean Region—is part of a larger effort in the region to assess the effectiveness of social protection programs. Copies of the paper are available free from the World Bank, 1818 H Street NW, Washington, DC 20433. Please contact Maria Colchao, room I7-162, telephone 202-473-8048, fax 202-522-1202, email address mcolchao@worldbank.org. Policy Research Working Papers are also posted on the Web at http://econ.worldbank.org. The authors may be contacted at lrawlings@worldbank.org or gm_rubio@alumni.princeton.edu. (25 pages)

3120. Land Rights and Economic Development: Evidence from Vietnam

Quy-Toan Do and Lakshmi Iyer
(August 2003)

Do and Iyer examine the impact of land reform in Vietnam which gives households the power to exchange, transfer, lease, inherit, and mortgage their land-use rights. The authors expect this change to increase the incentives as well as the ability to undertake long-term investments on the part of households. Their difference-in-differences estimation strategy takes advantage of the variation across provinces in the issuance of land-use certificates needed to enforce these rights.

The results indicate that the additional land rights led to significant increases in the share of total area devoted to multi-year crops, as well as some increase in irrigation investment. These effects are stronger in areas that felt the impact of the land reform earlier.

This paper—a product of the Poverty Team, Development Research Group—is part of a larger effort in the group to investigate the impact of property rights. Copies of the paper are available free from the World Bank, 1818 H Street NW, Washington, DC 20433. Please contact Patricia Sader, room MC3-306, telephone 202-473-3902, fax 202-522-1151, email address psader@worldbank.org. Policy Research Working Papers are also posted on the Web at http://econ.worldbank.org. The authors may be contacted at qdo @worldbank.org or lakshmi@mit.edu. (28 pages)

3121. Do Bilateral Investment Treaties Attract Foreign Direct Investment? Only a Bit ... and They Could Bite

Mary Hallward-Driemeier
(August 2003)

Touted as an important commitment device that attracts foreign investors, the number of bilateral investment treaties (BITs) ratified by developing countries has grown dramatically. Hallward-Driemeier tests empirically whether BITs have actually had an important role in increasing the foreign direct investment (FDI) flows to signatory countries. While half of OECD FDI into developing countries by 2000 was covered by a BIT, this increase is accounted for by additional country pairs entering into agreements rather than signatory hosts gaining significant additional FDI. The results also indicate that such treaties act more as complements than as substitutes for good institutional quality and local property rights, the rationale often cited by developing countries for ratifying BITs. The relevance of these findings is heightened not only by the proliferation of such treaties, but by recent high profile legal cases. These cases show that the rights given to foreign investors may not only exceed those enjoyed by domestic investors, but expose policymakers to potentially large-scale liabilities and curtail the feasibility of different reform options. Formalizing relationships and protecting against dynamic inconsistency problems are still important, but the results should caution policymakers to look closely at the terms of agreements.

This paper—a product of Investment Climate, Development Research Group—is part of a larger effort in the group to understand the determinants of productive investment. Copies of the paper are available free from the World Bank, 1818 H Street NW, Washington, DC 20433. Please contact Anna Bonfield, room MC3-354, telephone 202-473-1248, fax 202-522-3518, email address abonfield @worldbank.org. Policy Research Working Papers are also posted on the Web at http://econ.worldbank.org. The author may be contacted at mhallward @worldbank.org. (36 pages)

3122. Individual Attitudes toward Corruption: Do Social Effects Matter?

Roberta Gatti, Stefano Paternostro. and Jamele Rigolini
(August 2003)

Using individual-level data for 35 countries, Gatti, Paternostro, and Rigolini investigate the microeconomic determinants of attitudes toward corruption. They find women, employed, less wealthy, and older individuals to be more averse to corruption. The authors also provide evidence that social effects play an important role in determining individual attitudes toward corruption, as these are robustly and significantly associated with the average level of tolerance of corruption in the region. This finding lends empirical support to theoretical models where corruption emerges in multiple equilibria and suggests that "big-push" policies might be particularly effective in combating corruption.

This paper—a joint product of Investment Climate, Development Research Group, and the Poverty Group, Poverty Reduction and Economic Management Network—is part of a larger effort in the Bank to understand the determinants of corruption. Copies of the paper are available free from the World Bank, 1818 H Street NW, Washington, DC 20433. Please contact Nelly Obias, room MC4-834, telephone 202-473-1986, fax 202-522-7496, email address nobias @worldbank.org. Policy Research Working Papers are also posted on the Web at http://econ.worldbank.org. The authors may be contacted at rgatti @worldbank.org,spaternostro@worldbank.org, or jpr@nyu.edu. (25 pages)

3123. Production and Cost Functions and their Application to the Port Sector: A Literature Survey

Beatriz Tovar, Sergio Jara-Díaz, and Lourdes Trujillo
(August 2003)

Seaports provide multiple services to ships, cargo, and passengers. These services can be performed by a combination of public and private initiatives. Usually, the role of public sector institutions is to regulate and supervise private firms. In performing that task public sector institutions require in-depth knowledge of firms' cost structure. This paper offers a review of the literature about ports' cost structure and of its implications for regulation. The paper argues that the operation of port terminals should be analyzed by means of multiproduct theory. This approach allows the calculation of several cost indicators (economies of scale, scope, and so forth) which are key tools to help regulators.

This paper—a product of the Finance and Private Sector Development Division, World Bank Institute—is part of a larger effort in the institute to provide policy-relevant material to infrastructure regulators and policymakers. Copies of the paper are available free from the World Bank, 1818 H Street NW, Washington, DC 20433. Please contact Gabriela Chenet-Smith, mail stop J3-304, telephone 202-473-6370, fax 202-676-9874, email address gchenet@worldbank.org. Policy Research Working Papers are also posted on the Web at http://econ.worldbank.org. Lourdes Trujillo may be contacted at ltrujillopd@ed.ulpgc.es. (31 pages)

3124. The Impact of Structural Reforms on Poverty: A Simple Methodology with Extensions

Neil McCulloch
(August 2003)

Structural reforms are often designed to change the prices of key goods and services. Since the overall intention of such reforms is the reduction of poverty, it is important to understand how the resulting price changes affect the poor. However, organizations seeking to provide timely advice to policymakers in developing countries often do not have the data and resources needed to undertake the most sophisticated approaches to such analysis. McCulloch outlines a simple methodology based on the analysis of household survey data to estimate the first-order impact of a variety of structural reforms. He also elaborates on the ways in which this methodology may be extended in a flexible way to account for particular features of a country in question. Finally, he outlines the direction of some extensions of the approach to tackle dynamics, risk, and qualitative poverty analysis.

This paper—a product of the International Trade Department, Poverty Reduction and Economic Management Vice Presidency—is part of a larger effort in the Bank to develop better methodologies for understanding the impact of structural reforms such as trade liberalization, privatization, and tax and subsidy reforms on poverty. Copies of the paper are available free from the World Bank, 1818 H Street NW, Washington, DC 20433. Please contact Melanie Faltas, room MC2-402, telephone 202-458-2323, fax 202-522-7551, email address mfaltas@worldbank.org. Policy Research Working Papers are also posted on the Web at http://econ.worldbank.org. The author may be contacted at nmcculloch@worldbank.org. (41 pages)

3125. Economic Analysis of Health Care Utilization and Perceived Illness: Ethnicity and Other Factors

Vicente B. Paqueo and Christian Y. Gonzalez
(August 2003)

Paqueo and Gonzalez look at the determinants of health-seeking behavior of the Mexican population and within this context focus on the effect of ethnicity. They address the following questions:

- To what extent are the indigenous people at a disadvantage health care-wise and in what particular health services are they disadvantaged?
- Is the health care gap due to indigenous cultures by itself as opposed to the impact of socioeconomic differences?
- What policy instruments can be used to reduce the gap?

The authors find that contrary to expectations, the indigenous people in Mexico tend to have a positive behavior toward modern preventive care compared with the nonindigenous population, holding socioeconomic factors constant. Apparently, there is no cultural barrier in regard to these services. But ethnicity remains negatively associated with the use of inpatient hospital care and medical and dental consultations. Insurance has a significant and positive effect on health care use. Therefore, it appears to be an effective instrument for addressing the health care disadvantages faced by the indigenous population in regard to inpatient care and the use of outpatient services of doctors, nurses, and dentists.

This paper—a product of the Social Protection Sector Unit, Latin America and the Caribbean Region—is part of a larger effort in the region to draw on lessons from Mexico on the provision of health services to indigenous people. Copies of the paper are available free from the World Bank, 1818 H Street NW, Washington, DC 20433. Please contact Roberto Guzman, room I7-168, telephone 202-473-2993, fax 202-676-0319, email address rguzman @worldbank.org. Policy Research Working Papers are also posted on the Web at http://econ.worldbank.org. The authors may be contacted at vpaqueo@worldbank.org or cgonzalez@worldbank.org. (24 pages)

3126. Public Disclosure of Environmental Violations in the Republic of Korea

Jong Ho Hong, Benoît Laplante , and Craig Meisner
(August 2003)

Since 1989, environmental authorities of the Republic of Korea have published on a monthly basis a list of enterprises violating the country's environmental rules and regulations. This may be the longest environmental public disclosure program currently in existence. Over the period 1993–2001 in excess of 7,000 violations have been recorded in these monthly violation lists, involving more than 3,400 different companies. In this paper, Hong, Laplante, and Meisner provide a comprehensive descriptive analysis of this dataset. Results suggest that the news media have given an important, though perhaps declining coverage, to the violation lists, with a focus on publicly traded companies, failures to operate pollution abatement equipment, and prosecutions.

This paper—a product of Infrastructure and Environment, Development Research Group—is part of a larger effort in the group to analyze the role of public disclosure as an environmental policy tool. Copies of the paper are available free from the World Bank, 1818 H Street NW, Washington, DC 20433. Please contact Yasmin D'Souza, room MC2-622, telephone 202-473-1449, fax 202-522-3230, email address ydsouza@worldbank.org. Policy Research Working Papers are also posted on the Web at http://econ.worldbank.org. Craig Meisner may be contacted at cmeisner@worldbank.org. (20 pages)

3127. Small and Medium Enterprises across the Globe: A New Database

Meghana Ayyagari, Thorsten Beck, and Asl1 Demirgüç-Kunt

This paper describes a new cross-country database on the importance of small and medium enterprises (SMEs). This database is unique in that it presents consistent and comparable information on the contribution of the SME sector to total employment and GDP across different countries. The dataset improves on existing publicly available datasets on several grounds. First, it extends coverage to a broader set of developing and industrial economies. Second, it provides information on the contribution of the SME sector using a uniform definition of SMEs across different countries, allowing for consistent cross-country comparisons. Third, while we follow the traditional definition of the SME sector as being part of the formal sector, the new database also includes the size of the SME sector relative to the informal sector. This paper describes the sources and the construction of the different indicators, presents descriptive statistics, and explores correlations with other socioeconomic variables.

This paper—a product of Finance, Development Research Group—is part of a larger effort in the group to study SME - related issues. Copies of the paper are available free from the World Bank, 1818 H Street NW, Washington, DC 20433. Please contact Agnes Yaptenco, room MC3-439, telephone 202-473-1823, fax 202-522-1155, email address ayaptenco @worldbank.org. Policy Research Working Papers are also posted on the Web at http://econ.worldbank.org. The authors may be contacted at tbeck@worldbank.org or ademirguckunt@worldbank.org. (33 pages)

3128. Child Growth, Shocks, and Food Aid in Rural Ethiopia

Takashi Yamano, Harold Alderman, and Luc Christiaensen
(August 2003)

Over the past decades child stunting in Ethiopia has persisted at alarming rates. While the country experienced several droughts during this period, it also received enormous amounts of food aid, leading some to question the effectiveness of food aid in reducing child malnutrition. Using nationally representative household surveys from 1995–96 and controlling for program placement, Yamano, Alderman, and Christiaensen find that children between 6 and 24 months experienced about 0.9 cm less growth over a six-month period in communities where half the crop area was damaged compared with those without crop damage. Food aid was also found to have a substantial effect on the growth of children in this age group. And on average, the total amount of food aid appeared to be sufficient to protect children against plot damage, an encouraging sign that food aid can act as an effective insurance mechanism, though its cost-effectiveness needs further investigation.

This paper—a product of Public Services, Development Research Group—is part of a larger effort in the group to understand the consequences of economic shocks. Copies of the paper are available free from the World Bank, 1818 H Street NW, Washington, DC 20433. Please contact Hedy Sladovich, room MC3-607, telephone 202-473-7698, fax 202-522-1154, email address hsladovich@worldbank.org. Policy Research Working Papers are also posted on the Web at http://econ.worldbank.org. The authors may be contacted at yamanota@grips.ac.jp, halderman@worldbank.org, or lchristiaensen@worldbank.org. (29 pages)

3129. Price Caps, Efficiency Payoffs, and Infrastructure Contract Renegotiation in Latin America

Antonio Estache, Jose-Luis Guasch, and Lourdes Trujillo
(August 2003)

Twenty years ago, as the United Kingdom was getting ready to launch the privatization of its public services, Professor Littlechild developed and operationalized the concept of price caps as a regulatory regime to control for residual monopoly conditions in those services. Ten years later, Latin American countries, as they embarked into their own infrastructure reforms, also adopted the price cap regulatory model. Relying on a large data base on the factors driving contract renegotiation in the region and a survey of the literature on efficiency gains, Estache, Guasch, and Trujillo assess the impact of this regulatory regime in Latin America. They show that while the expected efficiency gains were amply achieved, these gains were seldom passed on to the users. Instead they were shared by the government and the firms. Moreover, the adoption of price caps implied higher costs of capital and hence, tariffs, and brought down levels of investment.

This paper—a product of the Infrastructure Vice Presidency—is part of a larger effort in the vice presidency to improve knowledge of infrastructure needs. Copies of the paper are available free from the World Bank, 1818 H Street NW, Washington, DC 20433. Please contact Antonio Estache, room F11K-184, telephone 202-

458-1442, fax 202-676-9594, email address aestache@worldbank.org. Policy Research Working Papers are also posted on the Web at http://econ.worldbank.org. Jose-Luis Guasch may be contacted at jguasch@worldbank.org. (19 pages)

3130. The Role of Advocacy in Competition Policy: The Case of the Argentine Gasoline Market

Tomás Serebrisky
(September 2003)

In 2000 the Argentine antitrust authorities conducted a study of the state of competition in the gasoline market. The study concludes with a set of policy recommendations (that is, limits to vertical integration and to the duration of contracts between oil companies and gasoline stations) which were subsequently implemented by the Argentine government. This was one of the rare occasions where the Argentine antitrust authorities exercised its advocacy role in a country that underwent an extensive process of deregulation and privatization. Serebrisky assesses the design and impact of the policies recommended by the Argentine antitrust authorities. In particular, he evaluates under which circumstances the new policies can reduce barriers to entry and foster competition in the Argentine gasoline market.

This paper—a product of the Finance and Private Sector Development Division, World Bank Institute—is part of a larger effort in the institute to increase the understanding of infrastructure regulation. Copies of the paper are available free from the World Bank, 1818 H Street NW, Washington, DC 20433. Please contact Gabriela Chenet-Smith, room J3-304, telephone 202-473-6370, fax 202-676-9874, email address gchenet@worldbank.org. Policy Research Working Papers are also posted on the Web at http://econ.worldbank.org. The author may be contacted at tserebrisky @worldbank.org. (31 pages)

3131. Social Sector Expenditures and Rainy-Day Funds

Christian Y. Gonzalez and Vicente B. Paqueo
(September 2003)

Gonzalez and Paqueo examine the effects of budget stabilization funds—often called rainy-day funds—on the volatility of social spending and, for contrast, on nonsocial sector spending. They analyze the rainy-day funds of U.S. states. The authors find that rainy-day funds are ineffective in reducing the volatility of nonsocial sector expenditures but are effective in reducing the volatility of social sector expenditures. The authors also find that states that have stringent deposit and withdrawal rules have higher rainy-day fund balances, and thus are more effective in reducing the volatility of social sector expenditures. Finally, for long-term effectiveness, stabilization funds depend obviously on sustained economic growth.

This paper—a joint product of the Economic Policy Sector Unit and the Social Protection Sector Unit, Latin America and the Caribbean Region—is part of a larger effort in the region to draw lessons from U.S. states on the effects of budget stabilization funds on the volatility of expenditures. Copies of the paper are available free from the World Bank, 1818 H Street NW, Washington, DC 20433. Please contact Patricia Holt, room I8-805, telephone 202-473-7707, fax 202-522-2119, email address pholt@worldbank.org. Policy Research Working Papers are also posted on the Web at http://econ.worldbank.org. The authors may be contacted at cgonzalez @worldbank.org or vpaqueo@worldbank. org. (19 pages)

3132. Regional Integration and Technology Diffusion: The Case of the North America Free Trade Agreement

Maurice Schiff and Yanling Wang
(September 2003)

The literature on regional integration agreements (RIAs) is vast and deals with political, economic, and political economy issues. The literature on the economics of RIAs deals mostly with static effects and concludes that these effects are, in general, ambiguous.

So far there has been no empirical analysis of the dynamic effects of RIAs based on their impact on technology diffusion from partner and nonpartner countries. Schiff and Wang's paper is a first attempt in this direction. The authors examine the impact of the North America Free Trade Agreement (NAFTA) on total factor productivity in Mexico through its impact on trade-related technology transfers from OECD countries. They estimate trade-related technology diffusion by using a measure of trade-related foreign research and development (R&D). Foreign R&D is constructed based on industry-specific R&D in the OECD, OECD-Mexico trade patterns, and input-output relations in Mexico.

The authors find that:

- Mexico's trade with its NAFTA partners had a large and significant impact on Mexico's total factor productivity, while trade with the rest of the OECD did not.
- Simulating the impact of NAFTA has led to a permanent increase in total factor productivity in Mexico's manufacturing sector of between 5.5 percent and 7.5 percent and to some convergence with the economies of Canada and the United States.

This paper—a product of Trade, Development Research Group—is part of a larger effort in the group to understand the link between trade and international technology diffusion. Copies of the paper are available free from the World Bank, 1818 H Street NW, Washington, DC 20433. Please contact Paulina Flewitt, mail stop MC3-303, telephone 202-473-2724, fax 202-522-1159, email address pflewitt@worldbank.org. Policy Research Working Papers are also posted on the Web at http://econ.worldbank.org. The authors may be contacted at mschiff @worldbank.org or wangy6@georgetown. edu. (20 pages)

3133. Emerging Trends in WTO Dispute Settlement: Back to the GATT?

Peter Holmes, Jim Rollo, and Alasdair R. Young
(September 2003)

As the number of cases in the World Trade Organization (WTO) dispute settlement system has increased, there has been a greater effort by the academic community to analyze the data for emerging trends. Holmes, Rollo, and Young seek to develop this literature using data up to the end of 2002 to ask whether recent trends confirm previously identified patterns and to examine whether there are divergences from the overall pattern according to the type of dispute. They focus on three questions in particular:

- What explains which countries are most involved in complaints under the dispute settlement understanding?

• Is there a discernible pattern to which countries win?

• Is there a difference to these patterns depending on the type of measure at the heart of the complaint?

The authors find that:

• A country's trade share is a pretty robust indicator of its likelihood to be either a complainant or a respondent.

• The frequently remarked absence of the least developed countries from the dispute settlement system can be explained by their low volume of trade.

• There is not much, if any, evidence of a bias against developing countries either as complainants or respondents.

• Regulatory issues are fading as reasons for disputes and trade defense disputes are the rising issue.

• Complainants overwhelmingly win (88 percent of cases).

• There is no strong evidence that the rate of completion of cases is biased against newly industrializing countries or traditional less developed countries.

This paper—a product of Trade, Development Research Group—is part of a larger effort in the group to analyze the behavior of the WTO dispute settlement system so as to help developing countries more effectively integrate into the global trade environment. An earlier version of this paper was presented to the World Trade Forum 2002. Copies of the paper are available free from the World Bank, 1818 H Street NW, Washington, DC 20433. Please contact Paulina Flewitt, mail stop MC3-303, telephone 202-473-2724, fax 202-522-1159, email address pflewitt@worldbank.org. Policy Research Working Papers are also posted on the Web at http://econ.worldbank.org. The authors may be contacted at p.holmes@sussex.ac.uk, a.young@socsci.gla.ac.uk, or lafd0@central.susx.ac.uk. (30 pages)

3134. Institutional Reform and the Judiciary: Which Way Forward?

Roumeen Islam
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Islam presents some general lessons in institution-building that has relevance for judiciary reform. She emphasizes the value of simplicity in design commensurate with country capacity, the importance of innovation and experimentation, and of economic openness in effective institution-building. The author underscores how the incentives of individuals depend on both the details of institutional design within the judiciary and also some critical institutions external to the judiciary. Finally she argues for the need to ground reform initiatives on a solid empirical and comparative approach. The author illustrates some of these issues by drawing on a recent project conducted by the World Bank and other institutions.

This paper—a product of the Poverty Reduction and Economic Management Division, World Bank Institute—is based on work done for *World Development Report 2002: Building Institutions for Markets*. Copies of this paper are available free from the World Bank, 1818 H Street NW, Washington, DC 20433. Please contact Roumeen Islam, room J4-151, telephone 202-473-2628, fax 202-676-9810, email address rislam@worldbank.org. Policy Research Working Papers are also posted on the Web at http://econ.worldbank.org. (42 pages)